

What is claimed is:

1. A programmable selective broadcasting reception system in which broadcasting contents broadcast at once from a broadcasting station to many unspecified people in a wide range are received by a reception apparatus,
  - 6        said broadcasting station comprising
  - 7            means for broadcasting a broadcasting contents
  - 8            program formed from broadcasting contents serving as
  - 9            data of contents to be broadcast, a contents attribute
  - 10          having a pair of an attribute and an attribute value of
  - 11          the broadcasting contents, and an execution program
  - 12          which describes a processing algorithm for determining
  - 13          whether to play back the broadcasting contents in said
  - 14          reception apparatus, and
  - 15        said reception apparatus comprising:
  - 16            a reception unit for receiving the
  - 17            broadcasting contents program; a user attribute storage
  - 18            unit for storing a pair of an attribute and an attribute
  - 19            value of a user; a current time acquisition unit for
  - 20            detecting current time and writing the current time at a
  - 21            time attribute value storage location of said user
  - 22            attribute storage unit at a predetermined time interval;
  - 23            a current place acquisition unit for detecting a current
  - 24            place of the user and writing the current place at a
  - 25            place attribute value storage location of said user

26 attribute storage unit at a predetermined time interval;  
27 an attribute input unit for inputting the attribute and  
28 the attribute value of said user attribute storage unit;  
29 an execution program storage unit, contents attribute  
30 storage unit, and broadcasting contents storage unit for  
31 respectively reading out and storing contents of the  
32 execution program, the contents attribute, and the  
33 broadcasting contents from the broadcasting contents  
34 program received by said radio reception unit; a  
35 playback unit for playing back the broadcasting  
36 contents; and an execution program engine for referring  
37 to the attribute value of said contents attribute  
38 storage unit and the attribute value of said user  
39 attribute storage unit to interpret and execute the  
40 execution program stored in said execution program  
41 storage unit, and when the broadcasting contents are  
42 determined to be broadcast, transmitting the  
43 broadcasting contents stored in said broadcasting  
44 contents storage unit to said playback unit.

2. A programmable selective broadcasting  
2 reception system in which broadcasting contents  
3 broadcast at once from a broadcasting station to many  
4 unspecified people in a wide range are received by a  
5 reception apparatus,  
6 said broadcasting station comprising  
7 means for broadcasting a broadcasting contents

8 program formed from broadcasting contents serving as  
9 data of contents to be broadcast, a contents attribute  
10 having a pair of an attribute and an attribute value of  
11 the broadcasting contents, and an execution program ID  
12 which stores an execution program ID set in advance, and  
13 said reception apparatus comprising:  
14 a reception unit for receiving the  
15 broadcasting contents program; a user attribute storage  
16 unit for storing a pair of an attribute and an attribute  
17 value of a user; a current time acquisition unit for  
18 detecting current time and writing the current time at a  
19 time attribute value storage location of said user  
20 attribute storage unit at a predetermined time interval;  
21 a current place acquisition unit for detecting a current  
22 place of the user and writing the current place at a  
23 place attribute value storage location of said user  
24 attribute storage unit at a predetermined time interval;  
25 an attribute input unit for inputting the attribute and  
26 the attribute value of said user attribute storage unit;  
27 an execution program retention unit for storing a  
28 plurality of pairs of IDs corresponding to execution  
29 programs each of which describes a processing algorithm  
30 for determining whether to play back the broadcasting  
31 contents; an execution program ID loading unit for  
32 reading out a value of the execution program ID from the  
33 broadcasting contents program received by said reception  
34 unit, extracting an execution program having the ID from

35 said execution program retention unit, and storing the  
36 execution program in said execution program storage  
37 unit; a contents attribute storage unit and broadcasting  
38 contents storage unit for respectively reading out and  
39 storing contents of the contents attribute and the  
40 broadcasting contents from the received broadcasting  
41 contents program; a playback unit for playing back the  
42 broadcasting contents; and an execution program engine  
43 for referring to the attribute value of said contents  
44 attribute storage unit and the attribute value of said  
45 user attribute storage unit to interpret and execute the  
46 execution program stored in said execution program  
47 storage unit, and when the broadcasting contents are  
48 determined to be broadcast, transmitting the  
49 broadcasting contents stored in said broadcasting  
50 contents storage unit to said playback unit.

3. A system according to claim 2, wherein  
2 said broadcasting station comprises means for  
3 transmitting pairs of a plurality of execution programs  
4 stored in said execution program retention unit and IDs  
5 corresponding to the respective execution programs, as  
6 an execution program transmission broadcasting program  
7 formed from an execution program transmission tag which  
8 stores a tag representing transmission of an execution  
9 program from said broadcasting station, and execution  
10 program transmission subsequent to the tag that includes

11 a plurality of pairs of execution program IDs and  
12 execution programs, and  
13       said reception apparatus has an execution  
14 program loading unit for, when said reception unit  
15 receives the execution program transmission broadcasting  
16 program, extracting a value of the execution program  
17 transmission subsequent to the tag representing  
18 transmission of the execution program, and storing a  
19 pair of the extracted execution program and an ID in  
20 said program retention unit.

4.       A programmable selective broadcasting  
2 apparatus for broadcasting at once broadcasting contents  
3 to many unspecified people in a wide range,  
4       said broadcasting apparatus comprising means  
5 for broadcasting a broadcasting contents program formed  
6 from broadcasting contents serving as data of contents  
7 to be broadcast, a contents attribute having a pair of  
8 an attribute and an attribute value of the broadcasting  
9 contents, and an execution program which describes a  
10 processing algorithm for determining whether to play  
11 back the broadcasting contents on a receiving side.

5.       A reception apparatus for receiving  
2 programmable selective broadcasting, comprising:  
3       a reception unit for receiving a broadcasting  
4 contents program formed from broadcasting contents

5 serving as data of contents to be broadcast, a contents  
6 attribute having a pair of an attribute and an attribute  
7 value of the broadcasting contents, and an execution  
8 program which describes a processing algorithm for  
9 determining whether to play back the broadcasting  
10 contents on a receiving side;

11       a user attribute storage unit for storing a  
12 pair of an attribute and an attribute value of a user;  
13        a current time acquisition unit for detecting  
14 current time and writing the current time at a time  
15 attribute value storage location of said user attribute  
16 storage unit at a predetermined time interval;

17        a current place acquisition unit for detecting  
18 a current place of the user and writing the current  
19 place at a place attribute value storage location of  
20 said user attribute storage unit at a predetermined time  
21 interval;

22       an attribute input unit for inputting the  
23 attribute and the attribute value of said user attribute  
24 storage unit;

25       an execution program storage unit, contents  
26 attribute storage unit, and broadcasting contents  
27 storage unit for respectively reading out and storing  
28 contents of the execution program, the contents  
29 attribute, and the broadcasting contents from the  
30 received broadcasting contents program;

31       a playback unit for playing back the

32 broadcasting contents; and  
33               an execution program engine for referring to  
34 the attribute value of said contents attribute storage  
35 unit and the attribute value of said user attribute  
36 storage unit to interpret and execute the execution  
37 program stored in said execution program storage unit,  
38 and when the broadcasting contents are determined to be  
39 broadcast, transmitting the broadcasting contents stored  
40 in said broadcasting contents storage unit to said  
41 playback unit.

6.               A digital broadcasting programmable  
2 selective broadcasting apparatus for broadcasting at  
3 once broadcasting contents to many unspecified people in  
4 a wide range,

5                said broadcasting apparatus comprising means  
6 for broadcasting a broadcasting contents program formed  
7 from broadcasting contents serving as data of contents  
8 to be broadcast, a contents attribute having a pair of  
9 an attribute and an attribute value of the broadcasting  
10 contents, and an execution program ID which stores an  
11 execution program ID set in advance.

7.               A programmable selective broadcasting  
2 reception apparatus comprising:  
3                a reception unit for receiving a broadcasting  
4 contents program formed from broadcasting contents

5 serving as data of contents to be broadcast, a contents  
6 attribute having a pair of an attribute and an attribute  
7 value of the broadcasting contents, and an execution  
8 program ID which stores an execution program ID set in  
9 advance;

10 a user attribute storage unit for storing a  
11 pair of an attribute and an attribute value of a user;  
12 a current time acquisition unit for detecting  
13 current time and writing the current time at a time  
14 attribute value storage location of said user attribute  
15 storage unit at a predetermined time interval;

16 a current place acquisition unit for detecting  
17 a current place of the user and writing the current  
18 place at a place attribute value storage location of  
19 said user attribute storage unit at a predetermined time  
20 interval;

21 an attribute input unit for inputting the  
22 attribute and the attribute value of said user attribute  
23 storage unit;

24 an execution program retention unit for  
25 storing a plurality of pairs of IDs corresponding to  
26 execution programs each of which describes a processing  
27 algorithm for determining whether to play back the  
28 broadcasting contents;

29 an execution program ID loading unit for  
30 reading out a value of the execution program ID from the  
31 received broadcasting contents program, extracting an

32 execution program having the readout ID from said  
33 execution program retention unit, and storing the  
34 execution program in said execution program storage  
35 unit;

36 a contents attribute storage unit and a  
37 broadcasting contents storage unit for respectively  
38 reading out and storing contents of the contents  
39 attribute and the broadcasting contents from the  
40 received broadcasting contents program;

41 a playback unit for playing back the  
42 broadcasting contents; and

43               an execution program engine for referring to  
44       the attribute value of said contents attribute storage  
45       unit and the attribute value of said user attribute  
46       storage unit to interpret and execute the execution  
47       program stored in said execution program storage unit,  
48       and when the broadcasting contents are determined to be  
49       broadcast, transmitting the broadcasting contents stored  
50       in said broadcasting contents storage unit to said  
51       playback unit.

8. An apparatus according to claim 6, wherein  
2 said broadcasting station comprises means for  
3 transmitting an execution program transmission  
4 broadcasting program formed from an execution program  
5 transmission tag which stores a tag representing  
6 transmission of the execution program, and execution

7 program transmission subsequent to the tag that includes  
8 a plurality of pairs of execution program IDs and  
9 execution programs.

9. A programmable selective broadcasting  
2 reception apparatus comprising:  
3 a reception unit for receiving a broadcasting  
4 contents program formed from broadcasting contents  
5 serving as data of contents to be broadcast, a contents  
6 attribute having a pair of an attribute and an attribute  
7 value of the broadcasting contents, and an execution  
8 program ID which stores an execution program ID set in  
9 advance, and receiving an execution program transmission  
10 broadcasting program formed from an execution program  
11 transmission tag which stores a tag representing  
12 transmission of a broadcast execution program, and  
13 execution program transmission subsequent to the tag  
14 that includes a plurality of pairs of execution program  
15 IDs and execution programs;  
16 a user attribute storage unit for storing a  
17 pair of an attribute and an attribute value of a user;  
18 a current time acquisition unit for detecting  
19 current time and writing the current time at a time  
20 attribute value storage location of said user attribute  
21 storage unit at a predetermined time interval;  
22 a current place acquisition unit for detecting  
23 a current place of the user and writing the current

24 place at a place attribute value storage location of  
25 said user attribute storage unit at a predetermined time  
26 interval;

27 an attribute input unit for inputting the  
28 attribute and the attribute value of said user attribute  
29 storage unit;

30 an execution program retention unit for  
31 storing a plurality of pairs of IDs corresponding to  
32 execution programs each of which describes a processing  
33 algorithm for determining whether to play back the  
34 broadcasting contents;

35 an execution program loading unit for, when  
36 said reception unit receives the execution program  
37 transmission broadcasting program, extracting a value of  
38 the execution program transmission subsequent to the tag  
39 representing transmission of the execution program, and  
40 storing a pair of the extracted execution program and an  
41 ID in said program retention unit;

42 an execution program ID loading unit for  
43 reading out a value of the execution program ID from the  
44 broadcasting contents program received by said reception  
45 unit, extracting an execution program having the readout  
46 ID from said execution program retention unit, and  
47 storing the execution program in said execution program  
48 storage unit;

49 a contents attribute storage unit and a  
50 broadcasting contents storage unit for respectively

51 reading out and storing contents of the contents  
52 attribute and the broadcasting contents from the  
53 received broadcasting contents program;  
54       a playback unit for playing back the  
55 broadcasting contents; and  
56       an execution program engine for referring to  
57 the attribute value of said contents attribute storage  
58 unit and the attribute value of said user attribute  
59 storage unit to interpret and execute the execution  
60 program stored in said execution program storage unit,  
61 and when the broadcasting contents are determined to be  
62 broadcast, transmitting the broadcasting contents stored  
63 in said broadcasting contents storage unit to said  
64 playback unit.

10.       A programmable selective broadcasting  
2 reception system in which broadcasting contents  
3 broadcast at once from a broadcasting station are  
4 received by a reception apparatus,  
5       said broadcasting station comprising:  
6       means for broadcasting a broadcasting contents  
7 program formed from broadcasting contents serving as  
8 data of contents to be broadcast, a contents attribute  
9 having a pair of an attribute and an attribute value of  
10 the broadcasting contents, and an execution program  
11 which describes a processing algorithm for determining  
12 whether to play back the broadcasting contents in said

13 reception apparatus, and  
14               said reception apparatus comprising:  
15                a reception unit for receiving the  
16 broadcasting contents program; a user attribute storage  
17 unit for storing a pair of an attribute and an attribute  
18 value of a user; an execution program storage unit,  
19 contents attribute storage unit, and broadcasting  
20 contents storage unit for respectively reading out and  
21 storing contents of the execution program, the contents  
22 attribute, and the broadcasting contents from the  
23 broadcasting contents program received by said radio  
24 reception unit; a playback unit for playing back the  
25 broadcasting contents; and an execution program engine  
26 for referring to the attribute value of said contents  
27 attribute storage unit and the attribute value of said  
28 user attribute storage unit to interpret and execute the  
29 execution program stored in said execution program  
30 storage unit, and when the broadcasting contents are  
31 determined to be broadcast, transmitting the  
32 broadcasting contents stored in said broadcasting  
33 contents storage unit to said playback unit.

11.         A programmable selective broadcasting  
2 reception system in which broadcasting contents  
3 broadcast at once from a broadcasting station are  
4 received by a reception apparatus,  
5               said broadcasting station comprising:

6 means for broadcasting a broadcasting contents  
7 program formed from broadcasting contents serving as  
8 data of contents to be broadcast, a contents attribute  
9 having a pair of an attribute and an attribute value of  
10 the broadcasting contents, and an execution program ID  
11 which stores an execution program ID set in advance, and  
12 said reception apparatus comprising:  
13 a reception unit for receiving the  
14 broadcasting contents program; an execution program  
15 retention unit for storing a plurality of pairs of IDs  
16 corresponding to execution programs each of which  
17 describes a processing algorithm for determining whether  
18 to play back the broadcasting contents; an execution  
19 program ID loading unit for reading out a value of the  
20 execution program ID from the broadcasting contents  
21 program received by said reception unit, extracting an  
22 execution program having the ID from said execution  
23 program retention unit, and storing the execution  
24 program in said execution program storage unit; a  
25 contents attribute storage unit and broadcasting  
26 contents storage unit for respectively reading out and  
27 storing contents of the contents attribute and the  
28 broadcasting contents from the received broadcasting  
29 contents program; a playback unit for playing back the  
30 broadcasting contents; and an execution program engine  
31 for referring to the attribute value of said contents  
32 attribute storage unit and the attribute value of said

33 user attribute storage unit to interpret and execute the  
34 execution program stored in said execution program  
35 storage unit, and when the broadcasting contents are  
36 determined to be broadcast, transmitting the  
37 broadcasting contents stored in said broadcasting  
38 contents storage unit to said playback unit.

12. A system according to claim 11, wherein  
2 said broadcasting station comprises means for  
3 transmitting pairs of a plurality of execution programs  
4 stored in said execution program retention unit and IDs  
5 corresponding to the respective execution programs, as  
6 an execution program transmission broadcasting program  
7 formed from an execution program transmission tag which  
8 stores a tag representing transmission of an execution  
9 program from said broadcasting station, and execution  
10 program transmission subsequent to the tag that includes  
11 a plurality of pairs of execution program IDs and  
12 execution programs, and  
13 said reception apparatus has an execution  
14 program loading unit for, when said reception unit  
15 receives the execution program transmission broadcasting  
16 program, extracting a value of the execution program  
17 transmission subsequent to the tag representing  
18 transmission of the execution program, and storing a  
19 pair of the extracted execution program and an ID in  
20 said program retention unit.

13. A programmable selective broadcasting  
2 apparatus for broadcasting at once broadcasting contents,  
3 said broadcasting apparatus comprising means  
4 for broadcasting a broadcasting contents program formed  
5 from broadcasting contents serving as data of contents  
6 to be broadcast, a contents attribute having a pair of  
7 an attribute and an attribute value of the broadcasting  
8 contents, and an execution program which describes a  
9 processing algorithm for determining whether to play  
10 back the broadcasting contents on a receiving side.

14. A reception apparatus for receiving  
2 programmable selective broadcasting, comprising:  
3 a reception unit for receiving a broadcasting  
4 contents program formed from broadcasting contents  
5 serving as data of contents to be broadcast, a contents  
6 attribute having a pair of an attribute and an attribute  
7 value of the broadcasting contents, and an execution  
8 program which describes a processing algorithm for  
9 determining whether to play back the broadcasting  
10 contents on a receiving side;  
11 a user attribute storage unit for storing a  
12 pair of an attribute and an attribute value of a user;  
13 an execution program storage unit, contents  
14 attribute storage unit, and broadcasting contents  
15 storage unit for respectively reading out and storing

16 contents of the execution program, the contents  
17 attribute, and the broadcasting contents from the  
18 received broadcasting contents program;  
19           a playback unit for playing back the  
20 broadcasting contents; and  
21           an execution program engine for referring to  
22 the attribute value of said contents attribute storage  
23 unit and the attribute value of said user attribute  
24 storage unit to interpret and execute the execution  
25 program stored in said execution program storage unit,  
26 and when the broadcasting contents are determined to be  
27 broadcast, transmitting the broadcasting contents stored  
28 in said broadcasting contents storage unit to said  
29 playback unit.

15.       A digital broadcasting programmable  
2 selective broadcasting apparatus for broadcasting at  
3 once broadcasting contents,  
4           said broadcasting apparatus comprising means  
5 for broadcasting a broadcasting contents program formed  
6 from broadcasting contents serving as data of contents  
7 to be broadcast, a contents attribute having a pair of  
8 an attribute and an attribute value of the broadcasting  
9 contents, and an execution program ID which stores an  
10 execution program ID set in advance.

16.       A programmable selective broadcasting

2 reception apparatus comprising:  
3       a reception unit for receiving a broadcasting  
4 contents program formed from broadcasting contents  
5 serving as data of contents to be broadcast, a contents  
6 attribute having a pair of an attribute and an attribute  
7 value of the broadcasting contents, and an execution  
8 program ID which stores an execution program ID set in  
9 advance;  
10        a user attribute storage unit for storing a  
11 pair of an attribute and an attribute value of a user;  
12        an execution program retention unit for  
13 storing a plurality of pairs of IDs corresponding to  
14 execution programs each of which describes a processing  
15 algorithm for determining whether to play back the  
16 broadcasting contents;  
17        an execution program ID loading unit for  
18 reading out a value of the execution program ID from the  
19 received broadcasting contents program, extracting an  
20 execution program having the readout ID from said  
21 execution program retention unit, and storing the  
22 execution program in said execution program storage  
23 unit;  
24        a contents attribute storage unit and a  
25 broadcasting contents storage unit for respectively  
26 reading out and storing contents of the contents  
27 attribute and the broadcasting contents from the  
28 received broadcasting contents program;

29               a playback unit for playing back the  
30 broadcasting contents; and  
31               an execution program engine for referring to  
32 the attribute value of said contents attribute storage  
33 unit and the attribute value of said user attribute  
34 storage unit to interpret and execute the execution  
35 program stored in said execution program storage unit,  
36 and when the broadcasting contents are determined to be  
37 broadcast, transmitting the broadcasting contents stored  
38 in said broadcasting contents storage unit to said  
39 playback unit.

17.         An apparatus according to claim 15, wherein  
2               said broadcasting station comprises means for  
3 transmitting an execution program transmission  
4 broadcasting program formed from an execution program  
5 transmission tag which stores a tag representing  
6 transmission of the execution program, and execution  
7 program transmission subsequent to the tag that includes  
8 a plurality of pairs of execution program IDs and  
9 execution programs.

18.         A programmable selective broadcasting  
2 reception apparatus comprising:  
3               a reception unit for receiving a broadcasting  
4 contents program formed from broadcasting contents  
5 serving as data of contents to be broadcast, a contents

6 attribute having a pair of an attribute and an attribute  
7 value of the broadcasting contents, and an execution  
8 program ID which stores an execution program ID set in  
9 advance, and receiving an execution program transmission  
10 broadcasting program formed from an execution program  
11 transmission tag which stores a tag representing  
12 transmission of a broadcast execution program, and  
13 execution program transmission subsequent to the tag  
14 that includes a plurality of pairs of execution program  
15 IDs and execution programs;

16           a user attribute storage unit for storing a  
17 pair of an attribute and an attribute value of a user;  
18           an execution program retention unit for  
19 storing a plurality of pairs of IDs corresponding to  
20 execution programs each of which describes a processing  
21 algorithm for determining whether to play back the  
22 broadcasting contents;

23           an execution program loading unit for, when  
24 said reception unit receives the execution program  
25 transmission broadcasting program, extracting a value of  
26 the execution program transmission subsequent to the tag  
27 representing transmission of the execution program, and  
28 storing a pair of the extracted execution program and an  
29 ID in said program retention unit;

30           an execution program ID loading unit for  
31 reading out a value of the execution program ID from the  
32 broadcasting contents program received by said reception

33 unit, extracting an execution program having the readout  
34 ID from said execution program retention unit, and  
35 storing the execution program in said execution program  
36 storage unit;

37           a contents attribute storage unit and a  
38 broadcasting contents storage unit for respectively  
39 reading out and storing contents of the contents  
40 attribute and the broadcasting contents from the  
41 received broadcasting contents program;

42           a playback unit for playing back the  
43 broadcasting contents; and

44           an execution program engine for referring to  
45 the attribute value of said contents attribute storage  
46 unit and the attribute value of said user attribute  
47 storage unit to interpret and execute the execution  
48 program stored in said execution program storage unit,  
49 and when the broadcasting contents are determined to be  
50 broadcast, transmitting the broadcasting contents stored  
51 in said broadcasting contents storage unit to said  
52 playback unit.